



**Antigua (2010): HIV/AIDS  
TRaC Study Evaluating Condom Use  
Among Spanish Speaking Sex Workers  
18-45 years. Second round**

**T h e P S I D a s h b o a r d**

**St. Johns, Antigua  
February 2010**

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**Antigua (2010): HIV/AIDS TRaC Study Evaluating Condom Use  
Among Spanish Speaking Sex Workers 18-45 years. Round 2**

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**Suggested citation of this work:**

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*<[http://www.psi.org/research/cat\\_socialresearch\\_smr.asp](http://www.psi.org/research/cat_socialresearch_smr.asp)>.*

## **Summary**

**Background & Research Objectives** The purpose of this study is to provide an assessment of the key health behaviors, determinants, and exposure to PSI programming among Spanish speaking sex workers in the capital of Antigua, where PSI is implementing a KfW and CIDA-funded project targeting sex workers. The survey was conducted in the capital of Antigua; St. Johns and seven surrounding areas: Villa, Johnsons, Point, Cassada Gardens and Malecon.

**Description of Intervention** PSI/SFHs HIV prevention programme targeting Spanish speaking sex workers promotes safer sexual behaviours through increased condom use among the target population using behaviour change communication activities that include peer education (peer education involves using persons from within the target population to build skill and efficacy in condom use and goal healthier behaviours) .

## **Methodology**

Respondent driven sampling (RDS) was used to recruit participants in the baseline (2008) and time location sampling (TLS) was used to recruit participants from known “hot spots” in follow-up (2010). The methodology used was changed to facilitate a more time effective and greater response rate. Several factors explain this situation: (a) due to the fears of being deported for residing illegally in the country many FSWs refused to participate in the study; (b) the high mobility of sex workers creates parallel extended networks of peers making recruitment difficult; (c) the economic incentive in the round one (1) study was below the rate of sexual services and therefore was not motivating. In the round two (2) study there was no economic incentive an arguably mainstay to engage sex work; (d) closely linked to point (a) some interviewers were not trusted among FSWs and thus deterring participation from the study. A total of 203 and 345 interviews respectively were completed for baseline and follow-up. “Hot spots” were defined as areas where females sex workers are known to congregate; e.g. community blocks, bars, clubs, etc. Analyses consisted of logistic regression and anovas to examine trends over time, to ascertain which determinants are correlated with key behaviors, and to examine the association between program exposure and changes in condom use behaviors and determinants. Socio-demographic characteristics and geographic location were controlled for in the analyses.<sup>1</sup>

## **Main Findings**

The monitoring table highlights that:

- The share of respondents who report carrying a condom at the time of the survey reached 43%, up from 8% two years ago ( $p<.001$ ). The number of respondents reporting using a female condom with a client also increased from 10% in baseline to 52% in follow-up period ( $p<0.001$ ).
- Demonstrating the correct use of a condom increased from 0.5% to 17% two years after ( $p<0.001$ ).

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<sup>1</sup> For more details about the methodology and data collection, please contact the first author for a copy of the study design document.

- The number of respondents who use female condoms with clients increased from 10% in baseline to 52% in follow-up ( $p<0.001$ ). The findings show a significant improvement in the use of female condoms with clients over time.
- Interestingly, the number of non-regular partners respondents had in the past 30 days increased in the follow-up from 6.67 to 2.45 in the baseline ( $p<0.001$ ).
- There was an overall improvement in the availability of condoms whether it was within 10 minutes of where respondents met their clients ( $p<0.001$ ), pharmacies near to where clients are met ( $p<0.001$ ), or nearby supermarkets where clients are met ( $p<0.05$ ). However, there was a drop in the number of respondents who found it easy to find a condom at all times of the night over the two year period ( $p<0.001$ ).
- Exposure to PSI/SFH print items, mass media and activities ( $p<0.001$ ) increased from the baseline to follow-up.

The results of segmentation analysis indicate that the probability of Spanish speaking SW using condoms consistently with client increases with:

- *Behaviour*: Almost 49% of those who carry a male condom with them consistently use condoms, the respective figure for inconsistent users is 33% ( $p<0.05$ ).
- *Beliefs*: SW who agree that condoms frequently leak are more likely to use condoms inconsistently with their clients than SW who do not agree (1.77 vs. 1.40,  $p<0.01$ ). However, respondents who agree that it is difficult to use condoms at all times with their clients are more likely to use condoms consistently than those who do not (2.37 vs. 2.00,  $p<0.05$ ). SWs who consistently use condoms are more likely to encounter difficult clients for the simple reason that they are always using a condom whereas, SWs who are inconsistent users will encounter fewer situations and as such believe that condoms are not difficult to use at all times.
- *Risk Perception*-SW with higher levels of risk perception in particular feeling at greater risk of contracting HIV by not consistently using condoms with client were more likely to use condoms consistently than those who had lower levels of risk perceptions (3.95 vs. 3.77,  $p<0.01$ ).
- *Self-efficacy*-As expected those feeling confident to ask their clients to use a condom were more likely to use condoms consistently with their clients than those who did not feel as confident (3.98 vs. 3.88,  $p<0.05$ ).
- *Exposure*-Overall exposure to PSI activities such as playing UNO, practising putting on a condom on a penis etc. was very low. However, those who were exposed to PSI activities were more likely to use condoms inconsistently than those who were not as exposed to PSI activities (1.17 vs. 0.89,  $p<0.05$ ). Shortly before the start of this study a major project that facilitated a substantial supply of socially marked condoms came to an end in Antigua resulting in a general mass shortage of condoms. Additionally, PSI Peer Educators target sex workers who are most at risk within an already high risk group this means that the movement towards goal healthier behaviours will take longer and require intense, consistent repeat exposure to PSI activities.
- *Marital Status*-Predictably participants who were not married were more likely to use condoms consistently than participants who were married (0.18 vs. 0.09,  $p<0.05$ ).

The results of segmentation analysis indicate that the probability of Spanish speaking SW using condoms correctly with client increases with:

- *Behaviour*: SW who had more casual partners in the past 30 days were more likely to be able to correctly demonstrate how to use a condom than those who had less casual partners (10.80 vs. 7.82,  $p<0.05$ ).

- *Beliefs*: Respondents who agree that condoms should only be used with new commercial partners are more likely to correctly demonstrate condom use than SW who do not agree (1.60 vs. 1.22,  $p<0.05$ ).
- *Self-efficacy*-As expected participants who agree that it is difficult to use condoms were more likely to demonstrate the incorrect use of condoms than those who did not find condoms difficult to use (3.25 vs. 2.55,  $p<0.01$ ). SW who were able to correctly put on a condom in the dark are also more likely to demonstrate the correct use of condoms than those who do not have this ability (3.18 vs. 2.76,  $p<0.05$ ).

The results of evaluation analysis reveal that PSI program exposure and Mass Media are associated with:

- An increase in correctly demonstrating how to use a condom ( $p<0.001$ ).
- Increased knowledge of methods of preventing the transmission of HIV ( $p<0.001$ ).
- There was an overall increase likelihood of SW using a female condom with a client from the period 2008 to 2010 whether persons were exposed to PSI specific programmes in 2010 or not ( $p<0.001$ ). This change in the non-exposed SW in 2010 can be attributed to other entities some of which PSI Caribbean had partnered with during this period to promote the use of female condoms.

### **Programmatic Recommendations**

- The program was very successful in increasing among SW their knowledge of methods of prevention of HIV.
- Results of segmentation analysis suggest that program messages developed should focus on highlighting the risks involved when condoms are not consistently used with clients as well as developing SW confidence to ask their clients to use a condom.
- Exposure to PSI Caribbean program interventions appears to successfully enhance SW ability to correctly use a condom. There is therefore the need to continue to focus on one on one interactions with SW to enhance this confidence to successfully be able to use a condom.
- The maintenance of the availability of condoms where SW work is important as well since it allows for easy access and increased use of condoms with clients. The distribution modes of condoms in the night should also be examined to determine if this could be improved since many SW work in the night period.
- The promotion of the use of female condoms with a client should be continued through PSI programmes. Given the increase in use from 2008 to 2010 among SW it is evident that the target population sees the use of female condoms as a viable alternative to male condoms. Although the results are positive in terms of use among SW PSI Caribbean cannot be solely credited for this movement. It is therefore important in future that PSI Caribbean in partnering with other groups in country ensure that GIGI brand/campaign is allowed some visibility.

The above recommendations will be implemented throughout PSI Caribbean program's main activities and will include:

- Participation in BCC interventions that include: one to one interventions, small group activities and satellite tables (strategically positioned information table that fosters interactive learning)
- Design, development and distribution of interpersonal education materials
- Mass media strategies that include print, radio and television programming

Monitoring Table

Trends in Behaviours, OAM determinants of behaviours and exposure among sex workers in Antigua, 2010

Risk: Spanish-speaking sex workers aged 18-45

Behavior: *Correct and consistent condom use*

INDICATORS	Baseline April 2008 (N=203)	Follow Up February 2010 (N=345)	Sig
<b>BEHAVIOR/USE</b>	Mean/%	Mean/%	
* The last time you had sex with a “friend” did you use a condom?	93%	90%	N.S.
* ♠ Consistent condom use with “friend” in the last 30 days	77%	72%	N.S.
* ♥ Consistent condom use with “friend” in the last 30 days (of those reporting having had a friend in the last 30 days)	88%	88%	N.S.
♦ Consistent condom use with “friends” in the last 3 months	76%	71%	N.S.
Carrying male condom at the time of survey	8%	43%	***
Has used a female condom with a “friend” / client	10%	52%	***
* ♣ Correctly demonstrates how to use a condom	0.5%	17%	***
Use other methods of pregnancy prevention	-	96%	
Ever accompanied to a medical service provider	-	73%	
<b>NEED/RISK</b>	Mean/%	Mean/%	
- Number of regular partner/s in the last 30 days	1.03	1.33	N.S.
- Number of non-regular partner/s in the last 30 days	2.45	6.67	***
- Number of commercial partner/s in the last 30 days	6.45	8.42	N.S.
- Number of sex acts with regular partner/s	7.17	12.10	**
- Number of sex acts with non-regular partner/s	7.91	9.23	N.S.
- Number of sex acts with commercial partner/s <sup>2</sup>	5.39	11.13	***
<b>OPPORTUNITY</b>	Mean/%	Mean/%	
<i>Availability</i>			
Condoms are available within 10 minutes of where I meet “friends”	3.68	3.89	***
It’s NOT difficult to get a condom when I need one	2.59	2.88	**
Nearby pharmacies where I meet “friends” always have condoms for sale	3.73	3.91	***
Nearby supermarkets where I meet “friends” always have condoms for sale	3.63	3.87	**
Condoms are NOT difficult to find at all times of the night	2.77	2.39	***

<sup>2</sup> N=189

**Monitoring Table: Population**
**Antigua, 2010**

<b>ABILITY</b>			
<b>Knowledge</b>	Mean/%	Mean/%	
• Knowledge index (from 0 to 5)	3.35	3.65	***
* Consistent condom use reduces the risk of HIV transmission during sexual intercourse	92%	99%	**
<b>Self-Efficacy</b>	Mean/%	Mean/%	
Is capable of correctly using a condom	3.68	3.46	N.S.
Can correctly put on a condom in the dark	2.88	2.85	N.S.
Is comfortable asking a client to use a condom	3.93	3.96	N.S.
Condoms are not difficult to use	2.98	3.20	N.S.
<b>MOTIVATION</b>	Mean	Mean/%	
<b>Belief</b>			
Condoms are used by people who care about their health	3.87	3.97	*
Using condoms at all times with clients is difficult	2.21	2.21	N.S.
Condoms should only be used with clients	1.42	1.25	*
<b>Locus of Control</b>			
If someone offers me a lot of money to have sex without condoms I WOULD NOT accept	3.81	3.87	N.S.
Condoms frequently leak	1.46	1.49	N.S.
Condoms should only be used with new commercial partners	1.42	1.24	*
<b>Risk Perception</b>			
I am at risk for HIV if I do not use condoms consistently with my friends.	3.89	3.90	N.S.
<b>EXPOSURE</b>	Mean/%	Mean/%	
Have you ever heard on a (Spanish) radio programme with a person talking about STIs?	5%	61%	***
Have you participated in a PSI/SFH organized event/ activity in the past six months?	1%	40%	***
Have you seen PSI/SFH print material in the past six months?	1%	62%	***
Have you seen this sticker in the last 6 months? (show sticker)	13%	64%	***
Have you seen this poster in the last 6 months? (show poster)	5%	65%	***
Have you seen this picture in the last 6 months? (show picture)	13%	71%	***
Have you ever participated in UNO card game concerning STDs?	1%	2%	N.S.
Have you participated in any activity which involved practicing placement of a condom on a wooden penis?	15%	54%	***
Have you ever participated in a BINGO game concerning STDs?	2%	1%	N.S.
Has seen at least one mass media message in the last 6 months/ Has seen or heard of "Got it Get it"?	19%	64%	***
Has participated in at least one PSI activity in the last 6 months	1%	40%	***
*Has heard of the female condom	64%	95%	***

Has seen GIGI logo at places/locations where condoms are sold?	-	70%	
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\*:p<0.05; \*\*:p<0.01; \*\*\*:p<0.001; ns: none significant.

Control variables included: age, level of education, marital status and city

\* Donor Indicators

♠ Here, “consistent condom use in last 30 days”, was measured through the question: how often did you use a condom when having sex with “friends” in the last 30 days? It includes cases that presumably did not have a friend/client in the last 30 days (missing cases on the questions on how many times did you have sex with this type of partner (friend) in the last 30 days).

♥ Here, consistent condom use in last 30 days, was measured by comparing the number of times a FSW reported sex (either vaginal or anal) in the last 30 days with a “friend/client”, against the number of times they reported condom use with that type of partner in the same period of time .

♦ Consistent condom use in the last 3 months was measured through the question: how often did you use a condom when having sex with “friends” in the last 3 months?

♣ Demonstration of condom use was measured by checking at informant’s performance in 8 items: expiration date, opening notch, opening of the condom packaging, identifying correct side to put on the condom, pinching the end of the condom, unrolling the condom on the wooden penis, taking off the condom, and throwing away the condom.

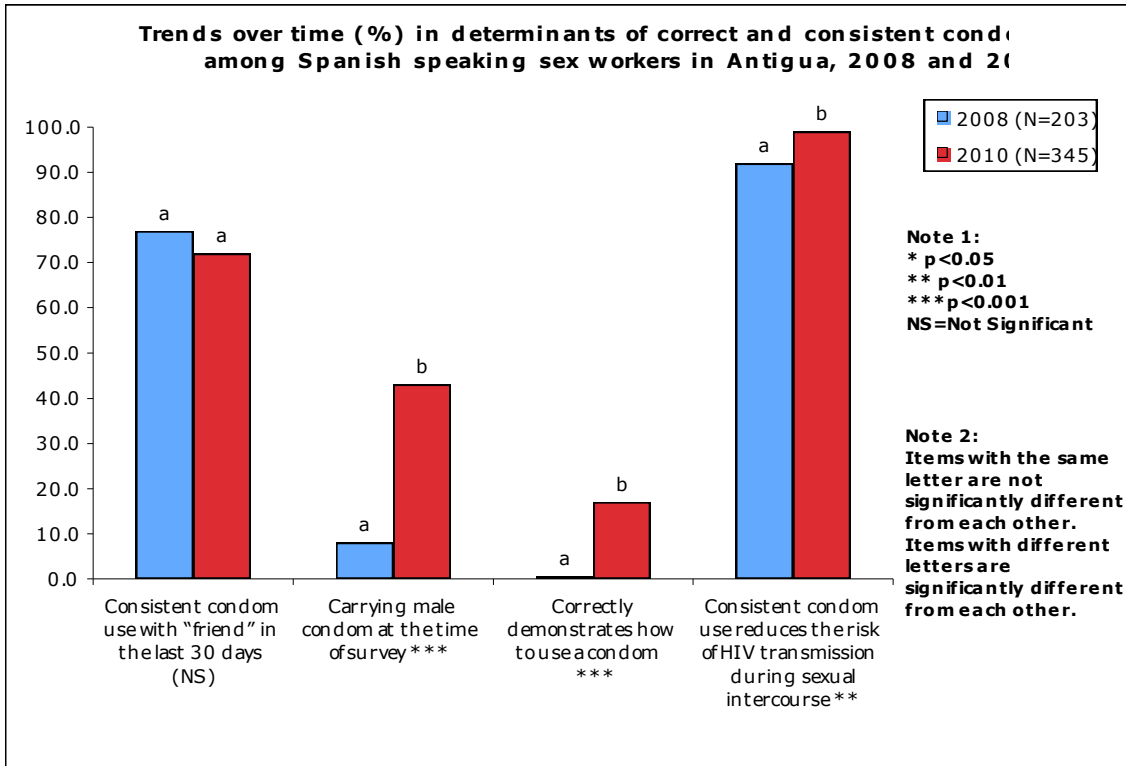
For OAM variables the range of scale responses is from 1 to 4: “1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree”.

• The Knowledge Index was built with 5 true/false questions. The range goes from 0 (none of the 5 questions were responded correctly) to 5 (all questions were responded correctly). The 5 questions used are:

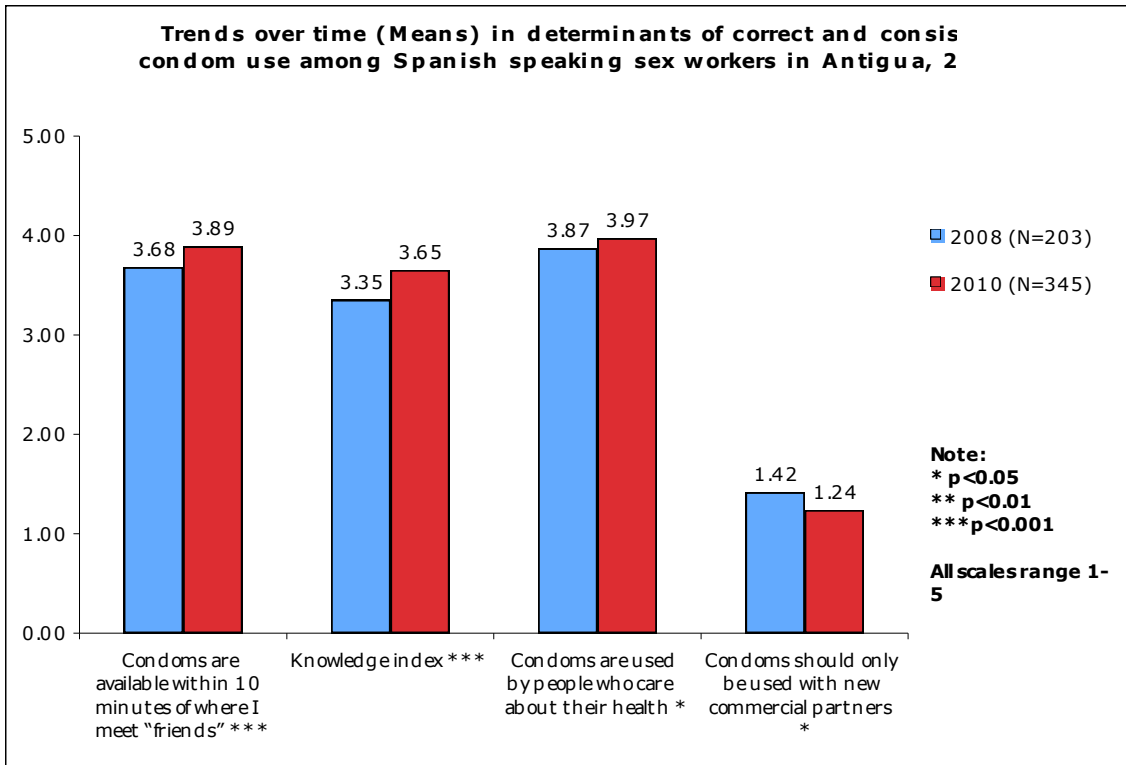
- Having an STI can increase the probability of getting HIV? (0=false, 1=true)
- A healthy looking person can have HIV? (0=false, 1=true)
- HIV cannot be transmitted through mosquito bite? (0=false, 1=true)
- HIV/AIDS cannot be transmitted by shaking hands with an HIV-positive person? (0=false, 1=true)
- Using condoms all the time reduces the risk of HIV transmission? (0=false, 1=true)



Monitoring Graph 1: Key Percentage Results



Monitoring Graph 2: Key Mean Results



**Segmentation Table**

Title: Determinants of Consistent Condom use in St. John’s and neighboring cities, Antigua 2010

Risk: Spanish-speaking sex workers aged 18-45 years

Behavior: Consistent condom use with clients

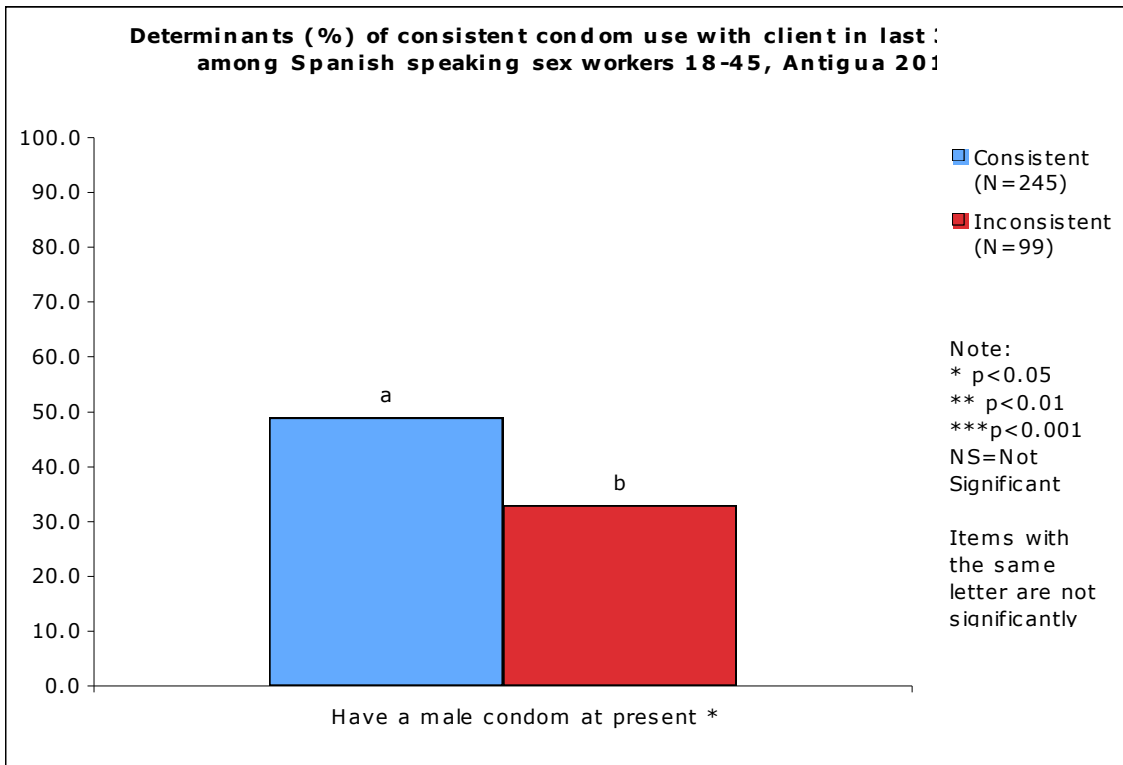
INDICATORS	Consistent Condom Use (N=344)		OR	Sig
	Consistent (N=245) 71%	Inconsistent (N=99) 29%		
<i>Behaviour</i>	Mean/ %	Mean/ %		
Have a male condom at present	49%	33%	1.91	*
<b>MOTIVACIÓN</b>				
<i>Beliefs</i>				
Condoms frequently leak (1-Strongly Disagree to 4-Strongly Agree)	1.40	1.77	0.62	**
Using condoms at all times with “friends” is difficult (1-Strongly Disagree to 4-Strongly Agree)	2.37	2.00	1.32	*
<i>Risk Perception</i>				
I am at risk for HIV if I do not use condoms consistently with my friends. (1-Strongly Disagree to 4-Strongly Agree)	3.95	3.77	1.96	**
<b>SKILL</b>				
<i>Self Efficacy</i>				
I feel confident asking my client for us to use a condom (1-Strongly Disagree to 4-Strongly Agree)	3.98	3.88	3.08	*
<b>EXPOSURE</b>				
Exposure to PSI activities (0-4)	0.89	1.17	0.62	*
<b>POPULATION CHARACTERISTICS</b>				
Marital Status (1=married, 0=not married)	0.09	.18	0.40	*

\*:p<0.05; \*\*:p<0.01; \*\*\*:p<0.001; ns: none significant.  
 Hosmer-Lemeshow goodness-of-fit:  $\chi^2$  (df=8) =5.19, p=0.74  
 Omnibus goodness-of-fit:  $\chi^2$  (df=14) = 58.31, p<0.000  
 Cox & Snell R<sup>2</sup>=0.16

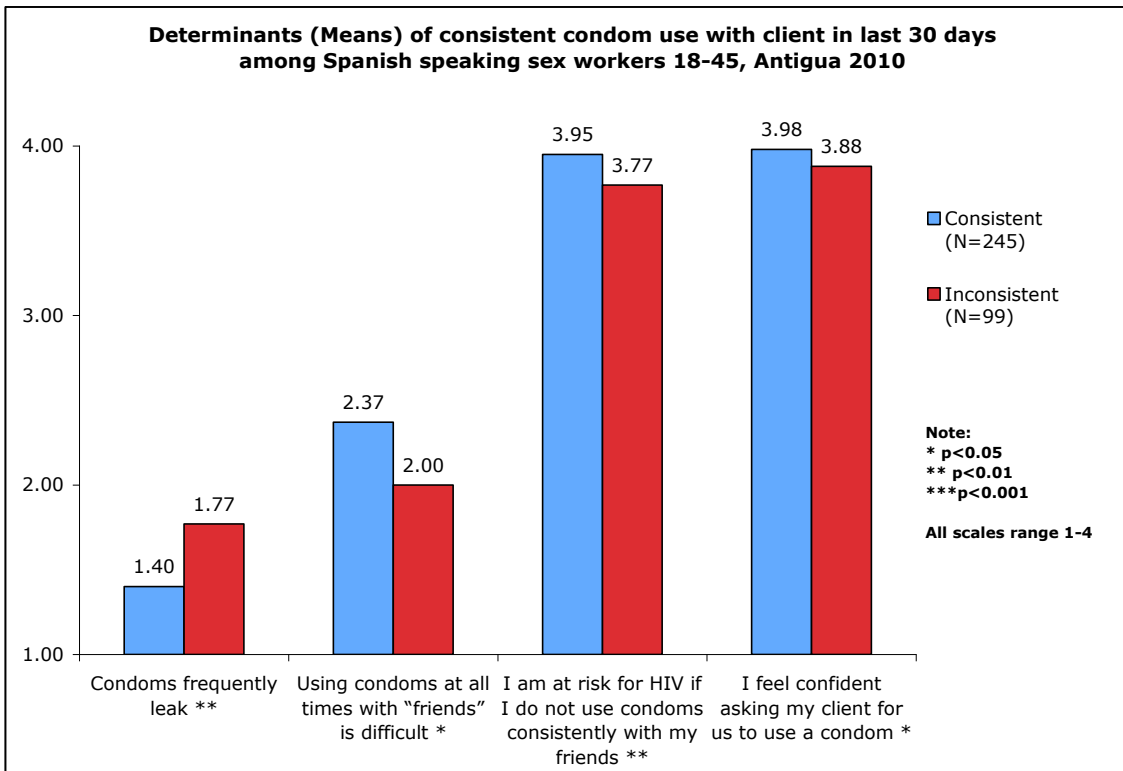
The range of scale items is from 1 to 4: “1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree”.

\*\* City of residence was used as the study design variable. It was included in every step of the regression analysis regardless of its association with consistent condom use

Segmentation Graph 1: Key Percentage Results



Segmentation Graph 2: Key Mean Results



**Segmentation Table**

Title: Determinants of Correct Condom use in St. John's and neighbouring cities, Antigua 2010

Risk: Spanish-speaking sex workers aged 18-45 years

Behavior: Correct condom use

INDICATORS	Correct (N=184) 36%	Incorrect (N=328) 64%	OR	Sig.
<b>BEHAVIOUR</b>	% or Mean	% or Mean		
<i>Behaviour</i>				
- Number of casual partners in the last 30 days	10.80	7.82	1.06	*
<i>Self Efficacy</i>				
- I can correctly put on a condom in the dark	3.18	2.76	1.35	*
- Condoms are difficult to use	2.55	3.25	0.64	**
<b>MOTIVATION</b>				
<i>Beliefs</i>				
- Condoms should only be used with new commercial partners (1-Strongly Disagree to 4-Strongly Agree)	1.60	1.22	1.60	*

\*:p<0.05; \*\*:p<0.01; \*\*\*:p<0.001; ns: none significant.

Hosmer-Lemeshow goodness-of-fit:  $\chi^2$  (df=8) = 13.22, p=0.105

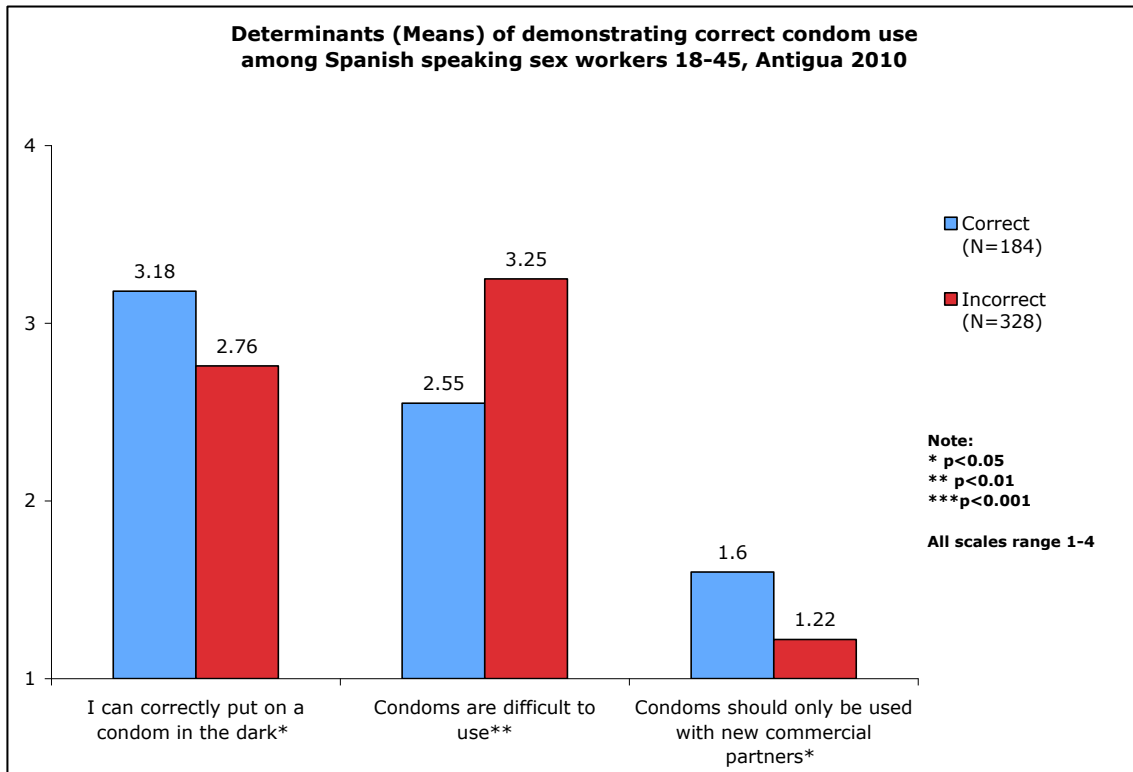
Omnibus goodness-of-fit:  $\chi^2$  (df=11) = 223.01, p<0.000

Cox & Snell R<sup>2</sup>=0.160

The range of scale items is from 1 to 4: "1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree".

\*\* City of residence was used as the study design variable. It was included in every step of the regression analysis regardless of its association with consistent condom use

Segmentation Graph 2: Key Mean Results



**Evaluation Table**

**Title:** Impact of PSI's IPC to Promote Healthy Sexual Behaviours Among Spanish-Speaking Sex Workers in Antigua-2008 and 2010

**Risk:** Spanish-Speaking Sex Workers

**Behavior:** Correct and consistent condom use

<b>Risk Group: Spanish-Speaking Sex Workers (age 18-45)</b>					
	<b>Baseline 2008</b>		<b>Follow up 2010</b>		
<b>INDICATORS</b>	<b>Non- exposed (N=173)</b>	<b>Exposed (N=31)</b>	<b>Non- exposed (N=109)</b>	<b>Exposed (N=235)</b>	<b>Sig.</b>
<b>BEHAVIOR/USE</b>	%	%	%	%	
Carrying male condom at the time of survey	7.5 <sup>a</sup>	11.6 <sup>a</sup>	37.8 <sup>b</sup>	45.9 <sup>b</sup>	***
Has used a female condom with a "friend" / client	3.4 <sup>a</sup>	24.0 <sup>b</sup>	46.6 <sup>c</sup>	56.3 <sup>c</sup>	***
Correctly demonstrates how to use a condom	0.0 <sup>a</sup>	0.0 <sup>a,b</sup>	8.1 <sup>b</sup>	22.0 <sup>c</sup>	***
<b>NEED/RISK</b>	%	%	%	%	
Number of non-regular partner/s in the last 30 days	5.66	7.08	8.19	8.78	N.S.
Number of sex acts with regular partner/s	6.88 <sup>a</sup>	8.61 <sup>a,b</sup>	12.57 <sup>b</sup>	11.93 <sup>b</sup>	*
Number of sex acts with commercial partner/s <sup>3</sup>	8.06	5.98	9.80	9.11	N.S.
<b>OPPORTUNITY</b>					
<i>Availability</i>					
Availability of condoms where clients are met	3.64 <sup>a</sup>	3.78 <sup>a,b</sup>	3.90 <sup>b</sup>	3.91 <sup>b</sup>	**
Condoms are not difficult to obtain when needed	2.73	2.63	3.00	2.73	N.S.
Pharmacies close to where I meet clients always have condoms for sale	3.69 <sup>a</sup>	3.78 <sup>a,b</sup>	3.93 <sup>b</sup>	3.93 <sup>b</sup>	*
Supermarkets close to where I meet clients always have condoms for sale	3.63 <sup>a</sup>	3.64 <sup>a,b</sup>	3.87 <sup>b</sup>	3.86 <sup>b</sup>	*
Condoms are not difficult to find at all times of the night	2.56 <sup>a</sup>	3.12 <sup>b</sup>	2.34 <sup>a</sup>	2.52 <sup>a</sup>	*
<b>ABILITY</b>	Mean	Mean	Mean	Mean	
<i>Knowledge</i>					
• Knowledge index (from 0 to 5)	3.31 <sup>a</sup>	3.47 <sup>a</sup>	3.44 <sup>a</sup>	3.75 <sup>b</sup>	***
<b>MOTIVATION</b>	Mean	Mean	Mean	Mean	
<i>Belief</i>					

<sup>3</sup> N=189

## Evaluation Table: Population

Antigua, 2010

Condoms are used by people who care about their health	3.86	3.96	3.96	3.97	N.S.
Condoms should only be used with new commercial partners	1.35	1.35	1.14	1.35	N.S.

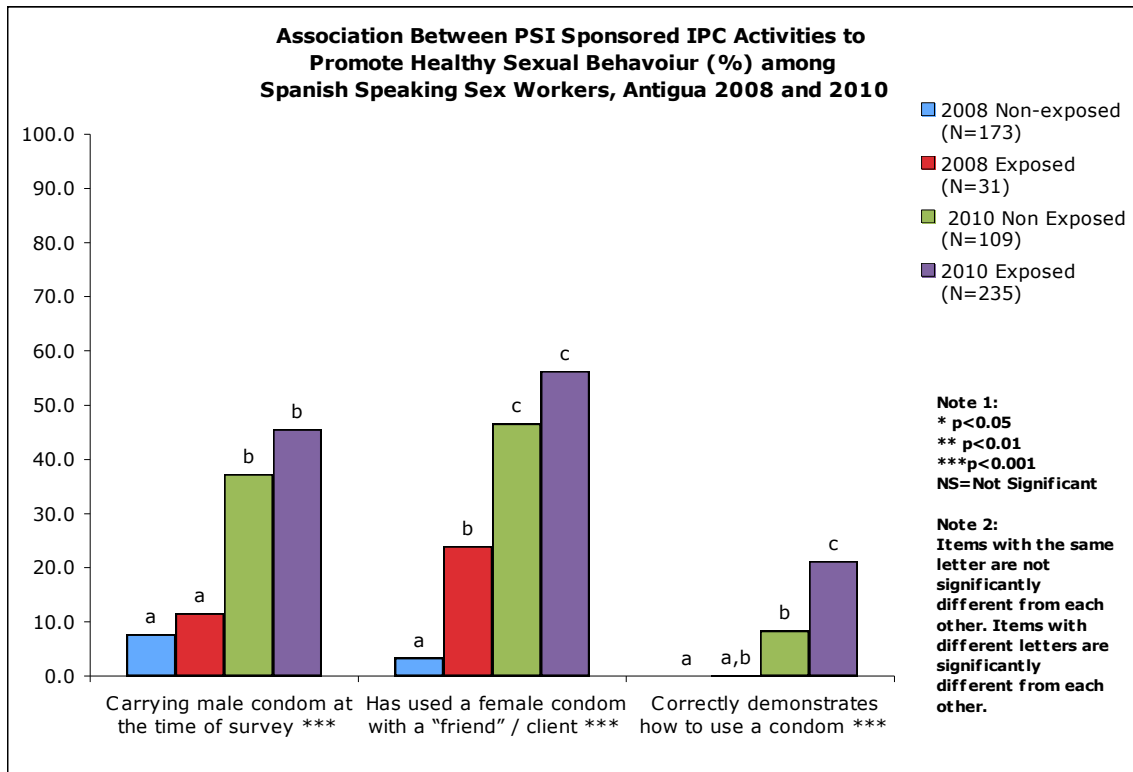
\*= p<.05; \*\* = p<.01; \*\*\* = p<.001; N.S. = non-significant

All analyses controlled for parish, age, education, marital status and exposure to IPC activities.

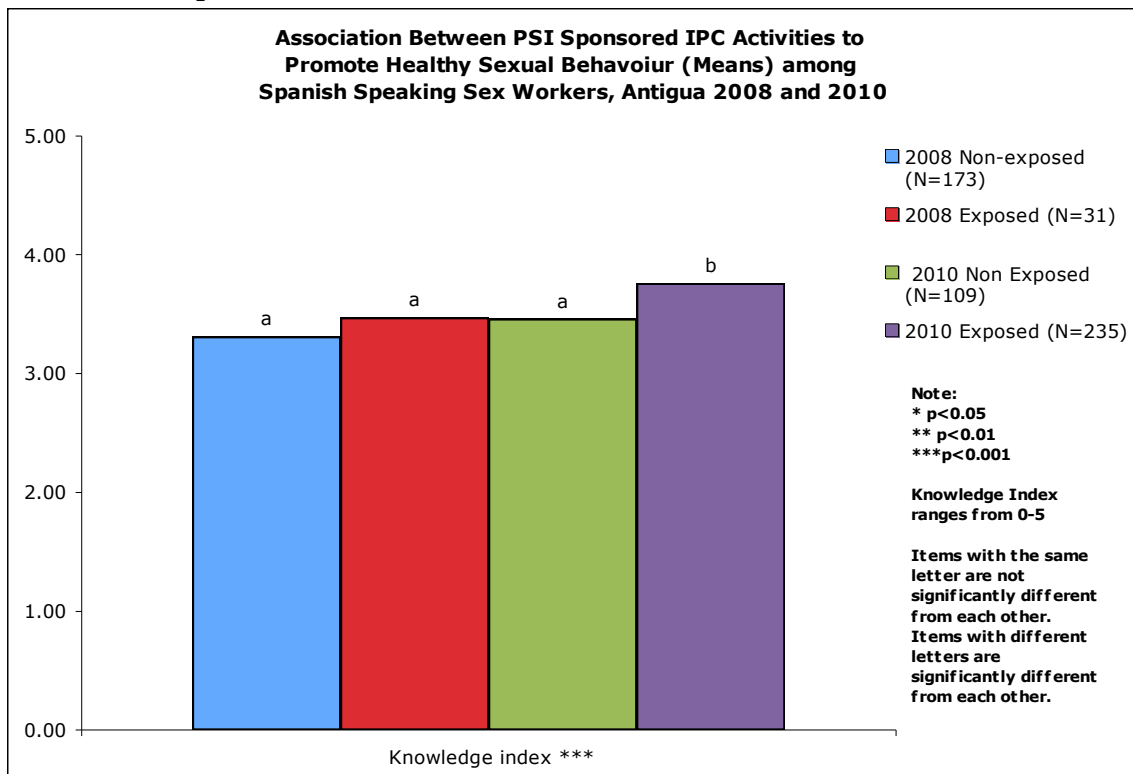
Numbers that share a letter are not significantly different from one another.

Four items were used to construct the IPC Exposure variable: Participated in a PSI/SFH organized event/activity in the last 6 months; Participated a card game called UNO; Participated in an activity where you practiced putting on a condom on a wooden penis and Participated in a game about STIs called BINGO,

Evaluation Graph 1:



Evaluation Graph 2:





**Evaluation Table**

**Title:** Impact of PSI's **Mass Media** to Promote Healthy Sexual Behaviours Among Spanish-Speaking Sex Workers in Antigua-2008 and 2010

**Risk:** Spanish-Speaking Sex Workers

**Behavior:** Correct and consistent condom use

<b>Risk Group: Spanish-Speaking Sex Workers (age18-45)</b>					
	<b>Baseline 2008</b>		<b>Follow up 2010</b>		
<b>INDICATORS</b>	<b>Non-exposed (N=136)</b>	<b>Exposed (N=68)</b>	<b>Non-exposed (N=54)</b>	<b>Exposed (N=290)</b>	<b>Sig.</b>
<b>BEHAVIOR/USE</b>	%	%	%	%	
Carrying male condom at the time of survey	13.7 <sup>a</sup>	12.6 <sup>a</sup>	54.3 <sup>b</sup>	37.9 <sup>b</sup>	***
Has used a female condom with a "friend" / client	7.0 <sup>a</sup>	19.1 <sup>a</sup>	64.4 <sup>b</sup>	48.2 <sup>b</sup>	***
Correctly demonstrates how to use a condom	0.00 <sup>a</sup>	1.4 <sup>a,b</sup>	9.6 <sup>b,c</sup>	19.0 <sup>c</sup>	**
<b>NEED/RISK</b>	%	%	%	%	
Number of non-regular partner/s in the last 30 days	4.20 <sup>a</sup>	7.93 <sup>b</sup>	8.24 <sup>b</sup>	8.76 <sup>b</sup>	*
Number of sex acts with regular partner/s	5.67 <sup>a</sup>	6.37 <sup>a</sup>	8.20 <sup>a</sup>	13.34 <sup>b</sup>	**
Number of sex acts with commercial partner/s <sup>4</sup>	5.82	8.15	7.03	10.47	N.S.
<b>OPPORTUNITY</b>					
<i>Availability</i>					
Condoms are available where clients are met	3.63 <sup>a</sup>	3.71 <sup>a,b</sup>	3.90 <sup>b,c</sup>	3.91 <sup>c</sup>	**
Condoms are not difficult to obtain when needed	2.76	2.72	3.11	2.74	N.S.
Pharmacies close to where I meet clients always have condoms for sale	3.67 <sup>a</sup>	3.74 <sup>a,b</sup>	3.93 <sup>b,c</sup>	3.94 <sup>c</sup>	*
Supermarkets close to where I meet clients always have condoms for sale	3.57 <sup>a</sup>	3.71 <sup>a,b</sup>	3.86 <sup>b</sup>	3.88 <sup>b</sup>	**
Condoms are not difficult to find at all times of the night	2.77 <sup>a</sup>	2.98 <sup>a</sup>	3.00 <sup>a</sup>	2.23 <sup>b</sup>	***
<b>ABILITY</b>	Mean	Mean	Mean	Mean	
<i>Knowledge</i>					
• Knowledge index (from 0 to 5)	3.39 <sup>a</sup>	3.33 <sup>a</sup>	3.52 <sup>a,b</sup>	3.66 <sup>b</sup>	*
<b>MOTIVATION</b>	Mean	Mean	Mean	Mean	

<sup>4</sup> N=189

## Evaluation Table: Population

Antigua, 2010

<i>Belief</i>					
Condoms are used by people who care about their health	3.91	3.82	3.93	3.97	N.S.
Condoms should only be used with new commercial partners	1.44	1.29	1.20	1.27	N.S.

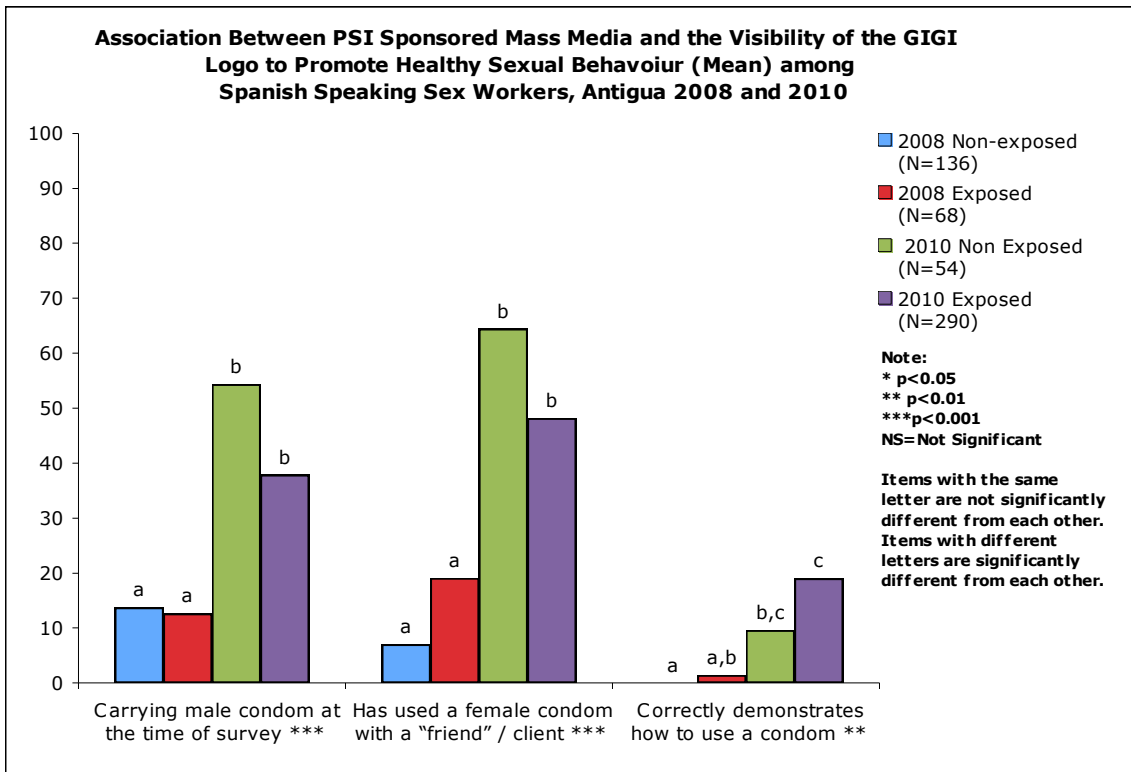
\*= p<.05; \*\* = p<.01; \*\*\* = p<.001; N.S. = non-significant

All analyses controlled for parish, age, education, marital status and exposure to mass media campaign including GIGI logo.

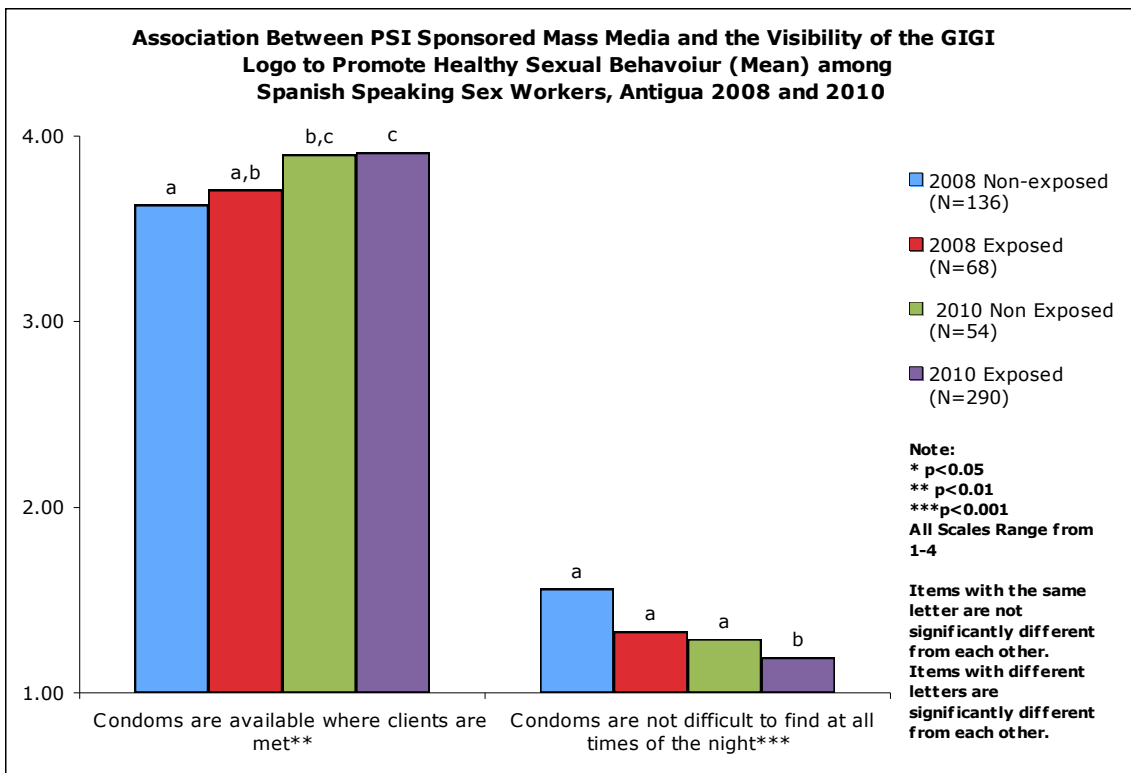
Numbers that share a letter are not significantly different from one another.

Six items were used to construct the Mass Media Exposure variable: Heard a person on the radio talking about PSI; has seen PSI material in the past six (6) months; has seen/heard GIGI; has seen GIGI posters in the past six (6) months; has seen GIGI stickers in the past six (6) months and has seen GIGI logo where condoms are sold

Evaluation Graph 3:



Evaluation Graph 4:



## Summary of Effect Table: Dashboard Interpretation

**Program:** Antigua HIV IPC, Antigua 2008 – 2010  
**Study Population:** Spanish speaking sex workers  
**Outcomes:** Correct and consistent Condom Use

INDICATORS	Change over time (Monitoring)	Association with program exposure (Evaluation)	Programmatic effect
<b>BEHAVIOR/USE</b>			
Carrying male condom at the time of survey	+	+	Positive
Has used a female condom with a “friend” / client	+	+	Positive
Correctly demonstrates how to use a condom	+	+	Positive
<b>NEED/RISK</b>			
Number of non-regular partner/s in the last 30 days	-	N.S.	No impact
Number of sex acts with regular partner/s	-	-	Negative
Number of sex acts with commercial partner/s <sup>5</sup>	-	N.S.	No impact
<b>OPPORTUNITY</b>			
<i>Availability</i>			
Availability of condoms where clients are met	+	+	Positive
Condoms are not difficult to obtain when needed	+	N.S.	No impact
Pharmacies close to where I meet clients always have condoms for sale	+	+	Positive
Supermarkets close to where I meet clients always have condoms for sale	+	+	Positive
Condoms are not difficult to find at all times of the night	-	N.S.	No impact
<b>ABILITY</b>			
<i>Knowledge</i>			
• Knowledge index (from 0 to 5)	+	+	Positive
<b>MOTIVATION</b>			
<i>Belief</i>			
Condoms are used by people who care about their health	+	N.S.	No impact
Condoms should only be used with new commercial partners	-	N.S.	No impact

<sup>5</sup> N=189

## Summary of Effect Table: Dashboard Interpretation

**Program:** Antigua HIV Mass Media, Antigua 2008 – 2010

**Study Population:** Spanish speaking sex workers

**Outcomes:** Correct and consistent Condom Use

INDICATORS	Change over time (Monitoring)	Association with program exposure (Evaluation)	Programmatic effect
<b>BEHAVIOR/USE</b>			
Carrying male condom at the time of survey	+	+	Positive
Has used a female condom with a “friend” / client	+	+	Positive
Correctly demonstrates how to use a condom	+	+	Positive
<b>NEED/RISK</b>			
Number of non-regular partner/s in the last 30 days	-	-	Negative
Number of sex acts with regular partner/s	-	-	Negative
Number of sex acts with commercial partner/s <sup>6</sup>	-	N.S.	No impact
<b>OPPORTUNITY</b>			
<i>Availability</i>			
Availability of condoms where clients are met	+	+	Positive
Condoms are not difficult to obtain when needed	+	N.S.	No impact
Pharmacies close to where I meet clients always have condoms for sale	+	+	Positive
Supermarkets close to where I meet clients always have condoms for sale	+	+	Positive
Condoms are not difficult to find at all times of the night	+	+	Positive
<b>ABILITY</b>			
<i>Knowledge</i>			
• Knowledge index (from 0 to 5)	+	+	Positive
<b>MOTIVATION</b>			
<i>Belief</i>			
Condoms are used by people who care about their health	+	N.S.	No impact
Condoms should only be used with new commercial partners	-	N.S.	No impact

<sup>6</sup> N=189

## Population Characteristics

<b>POPULATION CHARACTERISTICS</b>	<b>N=203 (2008) % or mean Mean</b>	<b>N=345 (2010) % or mean Mean</b>
Age at Last Birthday	31.43	33.66
<b>Marital Status</b>	<b>%</b>	<b>%</b>
Unmarried living with sex partner	35%	29%
Single	60%	58%
Married living with spouse/sex partner	3%	3%
Married not living with spouse/sex partner	2%	9%
Other	0%	0%
<b>Education</b>	<b>%</b>	<b>%</b>
Never attended school	1%	4%
Did not finish Primary	29%	19%
Primary	18%	20%
Secondary/high school	45%	45%
Technical/vocational	1%	4%
University	7%	7%
	<b>Mean</b>	<b>Mean</b>
Average Monthly income/allowance (over last year)	\$949.80	\$1,116.10
<b>Area Live</b>	<b>%</b>	<b>%</b>
Gray's Farm	21%	19%
Villa	27%	13%
St. John's	24%	5%
Johnsons	10%	6%
Point	11%	4%
Cassada Gardens	0%	6%
Malecon	0%	4%
Other	7%	43%
<b>Country Migrated From</b>		
Dominican Republic	98%	99%
Colombia	2%	1%
Other	1%	0%
<b>Places Visited In The Last 3 Years</b>		
Antigua	%	87%
Bahamas		1%

**Annex 1: Population Characteristics****Antigua, 2010**

Curacao	-	1%
Dominica	-	3%
Dominican Republic	-	37%
Martinique	-	2%
St. Kitts	-	7%
St. Lucia	-	1%
St. Maarten (Dutch)	-	6%
St. Maarten (French)	-	1%
Suriname	-	1%
Tortola	-	3%
Turks and Caicos	-	0%
Trinidad	-	2%
<b>Number of Children Under 18 Years</b>	<b>%</b>	<b>%</b>
No children	81%	68%
1 child	14%	25%
2 children	2%	5%
3 children	2%	2%
More than 3 children	1%	0%
<b>Number of Financially Dependent Persons Over 18 Years</b>	<b>%</b>	<b>%</b>
No one	16%	41%
1 person	28%	20%
2 persons	21%	20%
3 persons	18%	11%
More than 3 persons	17%	8%

## Reliability Analysis

Composite Variables	2008 (N=187)	2010 (N=338)
	Cronbach's Alpha	Cronbach's Alpha
<b>OPPORTUNITY</b>		
<p><i>Availability (1: strongly disagree; 4: strongly agree):</i></p> <ol style="list-style-type: none"> <li>1. Condoms are available within 10 minutes of where I meet clients "friends"</li> <li>2. Nearby pharmacies where I meet "friends" always have condoms for sale</li> <li>3. Nearby supermarkets where I meet "friends" always have condoms for sale</li> </ol>	<b>0.57</b>	<b>0.69</b>
<b>MOTIVATION</b>		
<p><i>Risk Perception (1: strongly disagree; 5: strongly agree):</i></p> <ol style="list-style-type: none"> <li>1. HIV is not as big a deal as the media makes it out to be</li> <li>2. The idea of getting HIV does not bother me at all</li> <li>3. I am at risk for HIV if I do not use condoms consistently with my "friends"</li> </ol>	<b>0.38</b>	<b>0.72</b>